



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/936,173

01/18/2002

Gai-Li Jiao

2577-107

9552

6449

7590

02/23/2005

ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER

HELMER, GEORGIA L

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,173

Applicant(s)

JIAO ET AL.

Examiner

Elizabeth F. McElwain

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8, 10, 11, 13-26, 28 and 30-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-8, 10, 11, 13-26, 28 and 30-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed October 6, 2004 has been entered.

Claims 1-3, 9, 12, 27 and 29 are cancelled.

Claims 4-8, 10, 11, 13-16, 18, 20-26 and 30 are currently amended.

Claims 31-36 are newly submitted.

Claims 4-8, 10, 11, 13-26, 28 and 30-36 are pending and are examined on the merits.

The supplemental reply filed on November 16, 2004 was not entered because supplemental replies are not entered as a matter of right except as provided in 37 CFR 1.111(a)(2)(ii). The supplemental reply is clearly not limited to placement of the application in condition for allowance. The supplemental reply sets forth additional arguments for consideration.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Any rejections that are not repeated have been withdrawn.

Claim Rejections - 35 USC § 112

1. Claims 4 and 31, and claims 5-8, 10-11, 13-26, 28 and 30-36 dependent thereon are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claims 4 and 31, and claims 5-8, 10-11, 13-26, 28 and 30-36 dependent thereon, are indefinite in the recitation of "multiple effect triazole", as stated in the last office action.

Art Unit: 1638

3. Applicant's arguments filed October 6, 2004 have been fully considered but they are not persuasive. Applicants argue that multi-effect triazole is readily known in the art, as evidenced by the Liang et al reference cited by the Examiner. The Examiner maintains that the metes and bounds of this term is unclear, and the specification fails to define or clarify the use of this term.

The rejection with regard to "fibrous root explant" has been withdrawn in view of the cancellation of claim 1 and the drafting of claim 31 to read "explants from fibrous roots".

The rejection with regard to the lack of antecedent basis for "root callus" in step (c) is withdrawn in view of the cancellation of claim 1 and the drafting of claim 31, which does not use this term.

The rejection with regard to "gene" is withdrawn in view of the cancellation of claim 1 and the use of "DNA encoding a chimeric gene of interest" in claim 31.

The rejection of the claims regarding "about" is withdrawn in view of applicants' arguments and the amendment of the claims.

The rejection with regard to "the selected callus culture" and "the induced somatic embryos" has been withdrawn given that this wording is no longer in the claims.

The rejection of the claims with regard to "the additional presence" is withdrawn in view of the amendment of the claims.

Art Unit: 1638

4. Claims 4-8, 10, 11, 13-26, 28 and 30-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, for the reasons of record set forth in the last office action.

5. Applicant's arguments filed October 6, 2004 have been fully considered but they are not persuasive. Applicants' assert that the rejection should be withdrawn given that the claims are drawn to an improved method for obtaining transgenic cotton plants, and the specification provides sufficient direction for those skilled in the art to practice the claimed invention. Applicants assert that the claims are limited to a particular strain of *Agrobacterium*, which is *Agrobacterium tumefaciens* and is commonly used for cotton transformation. The Examiner maintains that transformation of cotton is highly dependent on the particular variety or strain of *Agrobacterium* used, wherein there are many varieties and strains of *Agrobacterium tumefaciens*.

Applicants further argue that it is within the skill of those in the art to choose the vector to use for *Agrobacterium* transformation of cotton, and to produce a transgenic plant, wherein a working example of a single species of cotton is sufficient to enable the claimed method. Applicants state that once a variety of cotton has been transformed by the present method, the gene of interest can be moved to other varieties by breeding methods. Applicants assert that the use of fibrous root explants overcomes or minimizes problems associated with cotton transformation. The Examiner maintains that cotton transformation is highly unpredictable, and the claims are broadly drawn to encompass all cotton plants, all culture media including

Art Unit: 1638

any and all compositions, all Agrobacteria strains, all selectable agents and selective markers. However, the specification only discloses one set of conditions for use with one cotton plant and one strain of Agrobacterium. Therefore, it would require undue experimentation to make and/or use the invention, as broadly claimed.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia Helmer whose telephone number is (571) 272-0796. The examiner can normally be reached on increased flex time.

Art Unit: 1638

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (571) 272-0804. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Elizabeth F. McElwain, Ph.D.
Primary Examiner
Art Unit 1638

GH